

UNIVERSITY OF WISCONSIN MEDICAL SCHOOL

Department of Preventive Medicine

Center for Health Policy and Program Evaluation

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Combined Analysis of the State Treatment Needs Assessment Program Studies

A Study of the Need and Demand for Alcohol and Other Drug Abuse Treatment in Wisconsin

> Executive Summary October, 1999

Introduction

Alcohol and other drug abuse is a significant health problem in Wisconsin. Each year alcohol and drug abuse play a role in over 800 deaths, 10,000 traffic crashes, 8,000 serious injuries and 90,000 arrests. Alcohol and drug abuse is the fourth leading cause of death in Wisconsin behind heart disease, cancer, and stroke and the fourth leading cause for hospitalization behind mental illness, heart disease and cancer.

During the four years between 1995 and 1999, the Wisconsin Substance Abuse Treatment Needs Assessment Project studied alcohol and drug use among Wisconsin residents. The UW Center for Health Policy and Program Evaluation (CHPPE) integrated detailed finds from the Needs Assessment studies in a report titled "The Wisconsin Needs Assessment Project: An Integrative Analysis and Summary." This document is a summary of the CHPPE report.

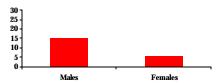
Statewide Household Survey: 1997

The University of Wisconsin's Wisconsin Survey Research Laboratory conducted confidential telephone interviews with a cross section of 9,500 adults and adolescents. They found that 81 percent of adults had consumed alcohol in the 18 months prior to the survey. Using screening questions that would typically be used to diagnose abuse of or dependence on alcohol or drugs, the study found that 9.8 percent of the adults met American Psychiatric Association Diagnostic and Statistical Manual (DSM III-R) criteria for an alcohol or other drug disorder and thus may be currently in need of treatment.

As many as 370,500 Wisconsin residents may currently be in need of alcohol or drug treatment

By gender, 15.2 percent of the adult males and 5.4 percent of the adult females were classified as in need of treatment. For the adolescent sample, 8.3 percent could be classified as having an alcohol or drug disorder. While the predominant drug of abuse among adults was alcohol, among adolescents it was marijuana.

Percent of Wisconsin adults classified as having an alcohol or drug disorder and needing treatment



Extending to the Wisconsin population as a whole, these findings imply that about 370,500 Wisconsin residents may need treatment for an alcohol or drug disorder. This is called "prevalence." According to the Wisconsin Family Health Survey, 90 percent of Wisconsin residents have health insurance, including private insurance, Medicaid or Medicare. Therefore, it can be estimated that 333,500 of these persons may be in need of insurance-funded treatment and 37,000 may be in need of other publicly subsidized treatment.

Pregnant Women Survey: 1997

A wide range of problems are associated with the use of alcohol and drugs by women during pregnancy. These include decreased fetal growth, pre-term labor and premature delivery, low birth weight, fetal malformations, neonatal mortality, child development problems, and other adverse pregnancy outcomes. It is not known precisely how many Wisconsin births are adversely affected by the consumption of alcohol or drugs. However, research has shown that any use of alcohol or mood altering drugs during pregnancy increases the risk of birth and developmental defects.

Researchers from the Wisconsin Survey
Research Laboratory conducted confidential
personal interviews and urine screens with a
cross section of 565 pregnant women. While
the majority of pregnant women interviewed
abstained from alcohol during pregnancy, 32
percent reported using alcohol at some time
during their pregnancy. Results from the urine
screens showed that 3.1 percent of the sample of
women were using mood-altering drugs.

Eleven percent of the pregnant women interviewed met DSM III-R criteria for treatment

Eleven percent of the pregnant women interviewed could be classified as needing treatment for an alcohol or drug disorder.

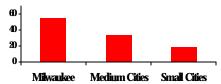
Arrestee Survey: 1996

The offender population in Wisconsin has a high incidence of alcohol and other drug abuse. The purpose of this study, conducted by Wisconsin Correctional Service of Milwaukee, was to document the extent of illicit drug use prior to arrest and jail admission and to identify the need for treatment among offenders. Researchers conducted personal interviews and drug tests with a cross section of 648 adult and juvenile offenders within 48 hours after admission to jail or detention.

Forty percent of the adult arrestees, and 26 percent of the juvenile detainees, tested positive for a mood-altering drug. Among adults the

largest number of positive tests was found in Milwaukee county, while the rural counties in the sample reported fewer positive urine screens. The most prevalent drug identified for the entire adult sample was marijuana. Cocaine was highest in the

Percent of arrestees testing positive for drugs



Milwaukee sub sample. However, self-reported alcohol use was far more common than any drug use indicated through urine screening or through self-report.

Thirty-two (32) percent of the adult offenders could be classified as in need of current treatment for an alcohol or other drug disorder. Most of these—24 percent—were dependent on alcohol. With 205,000 jail admissions each year in Wisconsin, this implies that 65,500 of the offenders may need treatment. Fifty-one percent, or 33,500, said they would enroll in treatment if it were offered.

Treatment Capacity Study: 1996

University of Wisconsin Center for Health Policy and Program Evaluation researchers collected information on the availability, amount, and costs of treatment services.

The study identified 410 agencies providing outpatient and residential alcohol and drug abuse treatment services in 850 locations around the state of Wisconsin. While most counties had sufficient capacity to provide services for referrals, 56 treatment centers among the 850 locations reported waiting lists, primarily for residential treatment.

56 of Wisconsin's 850 treatment centers had waiting lists

Detoxification and inpatient rehabilitation services accounted for 29 percent of the services received;

residential treatment 7 percent; intensive outpatient and day treatment 9 percent; and regular outpatient 55 percent.

The typical cost reported for treatment services was \$1,282 for regular outpatient; \$2,066 for medical detoxification; \$2,345 for intensive outpatient; \$3,663 for short-term residential treatment; \$4,972 for halfway house services; \$5,556 for day treatment/partial hospitalization; to \$8,684 for inpatient rehabilitation.

County Composite Indicators Study: 1991-1995

Also conducted by the Center for Health Policy and Program Evaluation, researchers analyzed 16 per capita statistical indicators of alcohol and drug abuse available at the county level. The intent was to determine which of the indicators were most closely connected. Just as statistics like home ownership, orders for manufactured goods, retail sales, and household income are considered "economic indicators", this study sought to develop a set of similar indicators that could be used to determine the concentration of alcohol and drug problems among Wisconsin counties

Through their analysis of available indicators, researchers identified two distinct alcohol and drug problem factors. The first group of indicators, called the "law enforcement factor," consisted of indicators of law enforcement activity related to alcohol and drug abuse such as drug arrests, intoxicated driving arrests, liquor law violations, and alcohol and drug-related hospitalizations. Counties with high per capita concentrations of these indicators also tended to have large urban centers and manufacturing industries

Statistical indicators identified counties where treatment admissions are lower than expected

The second grouping, called the "alcohol problems factor," was more characteristic of rural counties with tourism industries and counties bordering Illinois, Michigan and Minnesota.

Indicators in this assortment included alcoholrelated traffic crashes and fatalities, liquor licenses, and alcohol-related poisoning deaths. Scores were computed for each factor (range 0-100) and counties were ranked from highest to lowest.

Twenty additional local conditions were also analyzed as part of the study. Of these, welfare caseloads, public treatment admissions, and public treatment expenditures were found to be strongly associated with both factors.

Finally, this study examined the utility of the factors for predicting gaps in treatment services at the county level. In other words, could the factors be used to identify counties that were treating fewer persons than the factors would suggest? This analysis produced useful results that are discussed in the following "Combined Analysis" section and presented in the table at the end of this summary.

Combined Analysis

The five studies, taken together, provide useful information for making decisions about allocating resources for substance abuse treatment. The County Composite Indicators study factors correlated with treatment admission and expenditure data from the Treatment Capacity Study and a resulting treatment gap score was calculated (range –3 to +3 standard deviations). A negative treatment gap score could be used to identify counties that were treating relatively fewer clients than would be expected.

Age and Estimated AODA Prevalence							
Age Group	Percent of Prevalence	Percent of Treatment <u>Admissions</u>					
12-17	8.1	6.3					
18-24	23.6	15.9					
25-44	53.1	61					
45-64	13.6	14.9					
65 and over	1.6	1.9					

The Statewide Household, Pregnant Women, and Arrestee surveys found that only about 8 percent of those classified as needing treatment were currently receiving treatment. Our comparison of treatment admission data with the household survey prevalence estimates indicate that about 21 percent of those in need of treatment were currently receiving treatment.

Despite the disparity between the two estimates, both indicate that only a small minority of those in need of treatment actually receive treatment in a given time period.

With the exception of 18 to 24 year-olds, who are under served, the distribution of clients according to gender, ethnicity, and age, is consistent between the survey prevalence estimates and treatment admissions.

Services Needed and Received							
	Treatment Data	ASAM <u>Criteria</u>					
Regular Outpatient	75%	3%					
Intensive Outpatient and Day Treatment	13%	89%					
Inpatient and Residential	12%	8%					

NOTE: This analysis omits detoxification services.

A comparison between treatment utilization data and household survey data on the distribution of services needed according to the American Society of Addiction Medicine's criteria, suggests that intensive outpatient and day treatment services are greatly under-utilized.

Estimated Prevalence and Admissions by Sector						
	Adult <u>Prevalence</u>	Adult Treatment <u>Admissions</u>				
Public Sector	37,055	39,925				
Private Sector	333,485	60,000 est.				

The treatment capacity study estimated that 50,00 to 60,000 Wisconsin residents receive privately funded treatment annually. We also know that approximately 39,900 adults receive publicly subsidized treatment. Comparing these numbers to the survey prevalence estimates allows us to conclude that the publicly subsidized treatment system is responding fairly well to the need it was designed to meet. There is, however, a need for more effective public education, outreach, and policies in the private sector to close the treatment gap there.

Limitations

There are several limitations to this analysis that require mentioning here. First, the surveys were taken from samples of the population. While the number of persons surveyed was purposely large, due in part to the relatively low occurrence of alcohol and drug problems, there are still populations that were missed including those without telephones, the homeless, and those in institutions. These groups tend to have higher rates of social and health problems including substance abuse.

The county prevalence estimates developed in the study were based on sample sizes that were in some cases fairly small (137 respondents in the most extreme case). To a certain extent this problem was avoided by grouping counties together based on criteria developed by the Center for Health Statistics. However, it must be emphasized that these local level estimates are only approximate, with confidence intervals as large as plus or minus 6 percent.

The approach to classifying respondents as being in need of treatment was based upon techniques that are used in clinical treatment settings by qualified professionals. While the study interviewers were highly skilled, it is important to remember that the 9 percent of the population determined to be in need of treatment have not actually received a clinical diagnosis of substance abuse or dependence.

Another limitation is in the accuracy of treatment data. Much of the data on admissions was supplied by the providers, whose data systems vary greatly in quality.

The use of private sector treatment services is probably under-estimated, along with alternative treatment modalities such as Alcoholics Anonymous. Further it is not necessarily the case that private insurance covers all of the treatment costs incurred by the insured population. An unknown number of private clients would require some publicly funded AODA treatment.

Recommendations

Given these limitations and the information presented, what are the implications for

Wisconsin's alcohol and drug treatment system?

The chief recommendation of this combined analysis is to make a modest change in the way new resources are allocated. New funding should be aimed at areas with waiting lists, high composite factor scores, and negative treatment gap scores. The second recommendation of this study is that this new money be allocated toward expanding the availability of intensive outpatient and day treatment services and increasing outreach and treatment services for 18-24 year-olds.

Three Recommendations:

- Allocate new funding to areas of highest need
- ✓ Increase capacity for intensive outpatient and day treatment services
- Target 18-24 year-olds

Sources

This report summarizes a more complete report written by K. Welch, G. Fisher, M. Quirke and D. P. Moberg titled "The Wisconsin Needs Assessment Project: An Integrative Analysis and Summary." Readers wishing more detail may request a copy from the Bureau of Substance Abuse Services at the address listed below, or from:

> University of Wisconsin Center for Health Policy and Program Evaluation, 502 N. Walnut St., Madison, WI 53705.

Additional copies of this booklet or individua study reports are available from:

Bureau of Substance Abuse Services 1 W. Wilson St. #437

P.O. Box 7851

Madis on WI 53707

Adult Prevalence and Treatment Need Estimates: 1995-1997

County	Adult Population	Alcohol & Drug Disorder Prevalence Rate	Prevalence	Treatment Admits	Treatment Received Rate	Unmet Treatment Need	Law Enforcement Factor Score	Alcohol Problems Factor Score	Treatment Gap Score
County	1 opulation	1 revalence wate	Tievalence	Aumits	Nate	Neeu	ractor score	ractor score	
Adams	14091	6.5%	916	58	6.3%	858	9	49	-1.1
Ashland	12162	9.4%		479	41.9%	664	17	34	
Barron	31543	10.1%		599	18.8%	2587	12	35	
Bayfield	11155	9.4%	1049	287	27.4%	762	11	60	
Brown	155637	10.7%		2189	13.1%	14464	20	24	-0.7
Buffalo	10408	8.6%	895	49	5.5%	846	13	44	
Burnett	10886	10.1%		71	6.5%	1028	5	67	
Calumet	26272	9.2%	2417	119	4.9%	2298	11	23	0.4
Chippewa	38983	10.1%	3937	249	6.3%	3688	14	31	
Clark	23107	10.1%		122	5.2%	2212	4	31	0.3
Columbia	37050	11.0%		368	9.0%	3708	18	36	
Crawford	11850	8.7%		204	19.8%	827	11	44	
Dane	305687	9.8%	29957	9166	30.6%	20791	22	19	0.3
Dodge	60101	9.1%		411	7.5%	5058	14	30	
Door	20028	9.2%		244	13.2%	1599	10	50	
Douglas	32116	9.4%	3019	230	7.6%	2789	19	39	
Dunn	28937	10.1%	2923	410	14.0%	2513	25	16	
Eau Claire	66843	7.5%		1937	38.6%	3076	29	10	
Florence	3853	11.7%		1	0.2%	450	13	80	
Fond du Lac	68981	10.9%	7519	695	9.2%	6824	22	24	
Forest	6989	11.7%		181	22.1%	637	14	63	
Grant	36389	8.7%		678	21.4%	2488	13	29	
Green	23967	11.0%		471	17.9%	2165	13	31	
Green Lake	14460	14.8%		308	14.4%	1832	16	32	
Iowa	15777	8.7%		234	17.1%	1139	4	44	
Iron	5112	9.4%		59	12.3%	422	18	73	
Jackson	12698	8.6%		305	27.9%	787	11	52	
Jefferson	54437	9.1%		977	19.7%	3977	26	25	
Juneau	17428	6.5%		427	37.7%	706	15	41	
Kenosha	103861	11.6%		3997	33.2%	8051	28	25	-1.3
Kewaunee	14215	9.2%		71	5.4%	1237	12	37	
La Crosse	76875	15.3%		3956	33.6%	7806	27	15	
Lafayette	11771	8.7%		200	19.5%	824	4	40	
Langlade	15101	11.7%		190	10.8%	1577	13	35	
Lincoln	21653	11.7%		622	24.6%	1911	13	39	
Manitowoc	60783	8.2%		900	18.1%	4084	32	24	
Marathon	87598	10.0%		1589	18.1%	7171	14	29	
Marinette	31498	9.2%		565	19.5%	2333	13	49	
Marquette	10973	15.3%		109	6.5%	1570	3	63	
Menominee	2729	11.0%		136	45.3%	164	100	100	
Milwaukee	680199	10.0%		18150	26.7%	49870	56	0	
Monroe	27816	8.6%		191	8.0%	2201	21	31	
Oconto	24038	9.2%		83	3.8%	2128	0	65	
Oneida	27246	11.7%	3188	676	21.2%	2512	22	43	1.8

County	Adult Population	Alcohol & Drug Disorder Prevalence Rate	Prevalence	Treatment Admits	Treatment Received Rate	Unmet Treatment Need	Law Enforcement Factor Score	Alcohol Problems Factor Score	Treatment Gap Score
Outogomio	109795	10.8%	11858	2454	20.7%	9404	18	19	-0.6
Outagamie Ozaukee	59127	10.8%	5913	571	9.7%	5342	15	13	
	5113	8.6%	440	17	3.9%	423	11	21	
Pepin Pierce	25546	8.6% 10.1%	2580	451	3.9% 17.5%	2129	24	21 25	
Polk	27210	10.1%	2748	105	3.8%	2643	18	48	
Portage	48080	11.7%	5625	630	11.2%	4995	13	31	2
Price	11729	11.7%	1372	97	7.1%	1275	9	36	
Racine	133888	7.8%	10443	2616	25.1%	7827	25	23	-0.9
Richland	13117	8.7%	1141	184	16.1%	957	11	22	
Rock	109885	9.6%	10549	1470	13.9%	9079	35	15	
Rusk	11186	10.1%	1130	82	7.3%	1048	13	31	0.1
St. Croix	39534	10.1%	3993	411	10.3%	3582	20	42	
Sauk	38257	6.5%	2487	876	35.2%	1611	21	94	
Sawyer	11787	11.7%	1379	290	21.0%	1089	11	61	
Shawano	28289	9.2%	2603	404	15.5%	2199	19	17	
Sheboygan	80567	7.8%	6284	1843	29.3%	4441	25	20	
Taylor	13523	11.7%	1582	247	15.6%	1335	10	39	
Trempealeau	19439	8.6%	1672	163	9.8%	1509	9	50	-0.6
Vernon	19950	8.7%	1736	66	3.8%	1670	11	26	-0.2
Vilas	16229	9.4%	1526	113	7.4%	1413	26	81	0.3
Walworth	63465	11.7%	7425	576	7.8%	6849	45	26	-1.2
Washburn	11270	10.1%	1138	132	11.6%	1006	19	55	-1.1
Washington	80466	5.3%	4265	1203	28.2%	3062	17	19	-0.2
Waukesha	252051	7.8%	19660	6534	33.2%	13126	20	13	
Waupaca	36595	15.3%	5599	214	3.8%	5385	10	45	
Waushara	16114	15.3%	2465	225	9.1%	2240	5	53	
Winnebago	113886	13.1%	14919	1366	9.2%	13553	20	16	
Wood	55104	9.8%	5400	1524	28.2%	3876	20	24	-0.8
State	3804505	9.9%	376646	77827	20.7%	298819	20	~-	0.0

Adult Population: 1990 Census.

Prevalence Rate: Based upon the 1997 statewide household survey findings, applying DSM III-R criteria. Estimates for smaller rural counties are based on grouping two or more counties together based on criteria developed by the Center for Health Statistics. See the summary report for details.

Prevalence: The prevalence rate times the adult population. Confidence intervals may be as large as plus or minus six percent.

Treatment Admits: From a 1996 survey of public and private treatment providers. Includes all ages.

Treatment Received Rate: Treatment admits divided by prevalence.

Unmet Need: Prevalence minus admits.

Law Enforcement Factor: A score from 0 (least problems) to 100 (most problems) using a five-year (1991-1995) analysis of alcohol/drug hospitalizations, drug arrests, liquor law

violations, OWI arrests, and alcohol-related deaths.

Alcohol Problems Factor: A score from 0 (least problems) to 100 (most problems) using a five-year (1991-1995) analysis of liquor licenses, alcohol-related traffic crashes and fatalities, and alcohol-related deaths.

Treatment Gap Score: A score from -3 standard deviations (highest gap) to +3 standard deviations (lowest gap) computed from an analysis of the above two factors and treatment admits.